Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

AIR QUALITY PERMIT

Permittee Name:	Corning Incorporated
Mailing Address:	680 East Office Street, Harrodsburg, Kentucky 40330
Source Name:	Corning Incorporated
Mailing Address:	680 East Office Street, Harrodsburg, Kentucky 40330
Source Location:	Same as mailing address
Permit Type:	Federally-Enforceable
Review Type:	Title V
Permit Number:	V-98-030 (Revised)
Log Number:	F446
Revised Application Complete Date:	November 16, 1999
KYEIS ID #:	102-2740-0004
AFS Plant ID #:	21-167-00004
SIC Code:	3229
Region:	Bluegrass
County:	Mercer
Issuance Date:	**January 22, 1999**
Revision Date:	**November 30, 1999**
Expiration Date:	**January 22, 2004**

John E. Hornback, Director
Division for Air Quality

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**Pages reflecting changes due to minor permit revision.*

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application, for a minor source revision to the Title V permit, which was determined to be complete on November 16, 1999, the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto and shall become the final permit unless the U.S. EPA files an objection pursuant to Regulation 401 KAR 50:035, Section 21(3) .

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in the Regulation 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 01 Existing Operations for Raw Materials Handling

Description:

Machine Point	Description	Commenced operation	Operating rate
01	Railcar raw material unloading equipped with building enclosure	1966	25 tons/hour
02	Weight station 1 equipped with baghouse	1969	5 tons/hour
03	Weight station 2 equipped with baghouse	1970	5 tons/hour
04	Lancaster Mixer EB4 equipped with baghouse	1969	0.4 ton/hour
05	Lancaster Mixer EB4½ equipped with baghouse	1969	4 tons/hour

APPLICABLE REGULATIONS:

Regulation 401 KAR 61:020, Existing process operations, applicable to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulate, commenced before July 2, 1975.

1. Operating Limitations:

None

2. Emission Limitations:

a) Pursuant to Regulation 401 KAR 61:020, Section 3(2), particulate matter emissions into the open air from any machine point shall not exceed $4.10P^{0.67}$ pounds per hour based on a three-hour average, where P is the average processing rate calculated weekly in tons per hour.

b) Pursuant to Regulation 401 KAR 61:020, Section 3(1)(a), any continuous emission into the open air from any stack related to this emissions point shall not equal or exceed forty (40) percent opacity based on a six-minute average.

The permittee may assure compliance with the particulate mass and opacity standard by assuring proper operation of the baghouse. The proper operation of the baghouse can be ensured by complying with the visual observation requirements as described in the monitoring requirements subsection.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

3. Testing Requirements:

The permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. Monitoring Requirements:

a) The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment for making any necessary repairs.

b) The permittee shall monitor the amount of raw material processed and the hours of operation of each machine point on a weekly basis.

5. Recordkeeping Requirements:

The permittee shall maintain the record of raw material processed and hours of operation of the raw material handling at each machine point on a weekly basis.

6. Reporting Requirements:

See Conditions 5, 6, 7, and 8 in Section F.

7. Specific Control Equipment Operating Conditions:

a) The enclosures and baghouses shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 02 New Operations for Raw Materials Handling

Description:

Machine Point	Description	Commenced operation	Operating rate
01	Raw material separator equipped with baghouse	1992	7.5 tons/hour
02	Day bins system 1 equipped with baghouse	1993	7.5 tons/hour
03	Day bins system 2 equipped with baghouse	1993	7.5 tons/hour
04	Lancaster mixer 1 equipped with baghouse	1992	5 tons/hour
05	Eirich mixer equipped with baghouse	1982	7.5 tons/hour
06	Primary cullet crusher equipped with baghouse	1983	25 tons/hour
07	Secondary cullet crusher equipped with baghouse	1983	25 tons/hour
08	Loading into ophthalmic tanks equipped with building enclosure	1986	0.53 ton/hour
09	Loading into ADP tanks equipped with building enclosure	1989	5.32 tons/hour*

*Machine Point 09 has increased due to the addition of material loading for T135, T136, and T137.

APPLICABLE REGULATIONS:

Regulation 401 KAR 59:010, New process operations, applicable to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulate, commenced on or after July 2, 1975.

1. Operating Limitations:

None

2. Emission Limitations:

a) Pursuant to Regulation 401 KAR 59:010, Section 3(2), particulate matter emissions into the open air from any machine point shall not exceed $3.59P^{0.62}$ pounds per hour based on a three-hour average, where P is the average processing rate calculated weekly in tons per hour.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

b) Pursuant to Regulation 401 KAR 59:010, Section 3(1)(a), any continuous emission into the open air from any stack shall not equal or exceed twenty (20) percent opacity based on a six-minute average.

The permittee may assure compliance with the particulate mass and opacity standard by assuring proper operation of the baghouse. The proper operation of the baghouse can be ensured by complying with the visual observation requirements as described in the monitoring requirements subsection.

3. Testing Requirements:

The permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. Monitoring Requirements:

a) The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment for making any necessary repairs.

b) The permittee shall monitor the amount of raw material processed and the hours of operation of each machine point on a weekly basis.

5. Recordkeeping Requirements:

The permittee shall maintain the record of raw material processed and hours of operation of the raw material handling at each machine point on a weekly basis.

6. Reporting Requirements:

See Conditions 5, 6, 7, and 8 in Section F.

7. Specific Control Equipment Operating Conditions:

a) The enclosures and baghouses shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 03 Vacuum Systems

Description:

Machine Point	Description	Commenced operation	Operating rate
01	Central vacuum system equipped with baghouse	1981	0.2 ton/hour
02	Cullet crushing vacuum system equipped with baghouse	1983	0.2 ton/hour
03	Melting vacuum system equipped with baghouse	1983	0.2 ton/hour

APPLICABLE REGULATIONS:

Regulation 401 KAR 59:010, New process operations, applicable to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulate, commenced on or after July 2, 1975.

1. Operating Limitations:

None

2. Emission Limitations:

a) Pursuant to Regulation 401 KAR 59:010, Section 3(2), particulate matter emissions into the open air from any machine point shall not exceed $3.59P^{0.62}$ pounds per hour based on a three-hour average, where P is the average raw material processing rate calculated weekly in tons per hour.

b) Pursuant to Regulation 401 KAR 59:010, Section 3(1)(a), any continuous emission into the open air from any stack shall not equal or exceed twenty (20) percent opacity based on a six-minute average.

The permittee may assure compliance with the particulate mass and opacity standard by assuring proper operation of the baghouse. The proper operation of the baghouse can be ensured by complying with the visual observation requirements as described in the monitoring requirements subsection.

3. Testing Requirements:

The permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

4. Monitoring Requirements:

a) The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment for making any necessary repairs.

b) The permittee shall monitor the amount of material processed and the hours of operation of each machine point on a weekly basis.

5. Recordkeeping Requirements:

The permittee shall maintain the record of material processed and hours of operation of each machine point on a weekly basis.

6. Reporting Requirements:

See Conditions 5, 6, 7, and 8 in Section F.

7. Specific Control Equipment Operating Conditions:

a) The baghouses shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 04 Glass Melting Tank (T133)

Description:

Experimental glass melting furnace

Rated Capacity:	0.5 mmBTU/hour
Fuel:	Natural gas/propane fired
Construction commenced:	January 1986
Control equipment:	Baghouse
Processing rate:	0.025 ton/hour arsenic glass pull (F/G glass)
Alternate Processing rate:	0.050 ton/hour arsenic free glass pull (G glass)

APPLICABLE REGULATIONS:

Regulation 401 KAR 59:010, New process operations, applicable to each affected facility or source, associated with a process operation, which is not subject to another emission standard with respect to particulate, commenced on or after July 2, 1975.

Regulation 401 KAR 57:002, Section 3 (l), which incorporates by reference the federal regulation 40 CFR 61, Subpart N, National emission standard for inorganic arsenic emissions from glass manufacturing plants.

1. Operating Limitations:

The elemental arsenic addition to the glass melting furnace shall be less than 1.0 Mg in any consecutive twelve months period to qualify for demonstrating compliance with arsenic emission limitations through the procedure described in Regulation 40 CFR 61.164(c).

2. Emission Limitations:

a) Pursuant to Regulation 40 CFR 61.162(b)(1), uncontrolled total arsenic emission from the glass melting furnace shall be less than 0.4 Mg per year.

b) Pursuant to Regulation 401 KAR 59:010, Section 3(2), particulate matter emissions into the open air shall not exceed $3.59P^{0.62}$ pounds per hour based on a three-hour average, where P is the average raw material processing rate calculated weekly in tons per hour.

c) Pursuant to Regulation 401 KAR 59:010, Section 3(1)(a), any continuous emission into the open air shall not equal or exceed twenty (20) percent opacity based on a six-minute average.

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The permittee may assure compliance with the particulate mass and opacity standard by assuring proper operation of the baghouse. The proper operation of the baghouse can be ensured by complying with the visual observation requirements as described in the monitoring requirements subsection.

3. Testing Requirements:

While the unit is in operation the permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. Monitoring Requirements:

a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment for making any necessary repairs.

b) The permittee shall monitor the amount of raw material used and the hours of operation of the melting furnace on a weekly basis.

c) The permittee shall monitor all relevant information to estimate arsenic emission as described in Regulation 40 CFR 61.164(c).

5. Recordkeeping Requirements:

a) The permittee shall maintain the record of raw material used and hours of operation of glass melting furnace on a weekly basis.

b) Pursuant to Regulation 40 CFR 61.165(c), the permittee shall determine and record at the end of every six months the uncontrolled arsenic emissions rate for the preceding and forthcoming twelve months period. Each six months period will begin on January 1 and July 1 of each year.

c) The permittee shall estimate the elemental arsenic addition to the glass melting furnace on a monthly basis.

d) Pursuant to Regulation 40 CFR 61.165(a)(2), the permittee shall maintain records of emission test data and all calculations used to produce the required reports of emissions estimate to demonstrate compliance with arsenic emission standard.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

6. Reporting Requirements:

(a) Pursuant to Regulation 40 CFR 61.165(d)(4), the permittee shall submit to the division a written report of uncontrolled arsenic emission rates determined pursuant to Regulation 40 CFR 61.165(c), if

i) The emission rate for the preceding 12 month period (or preceding 6 month period for the first 6-month determination) exceeded the applicable limit.

ii) The emission rate for the forthcoming 12-month period will exceed the applicable limit. In that case, the permittee shall also notify the division of the anticipated date of the emission test to demonstrate compliance with the applicable limit pursuant to Regulation 40 CFR 61.162(b)(2).

b) Pursuant to Regulation 40 CFR 61.165(d)(5), the report shall be postmarked by the tenth day following the end of the 6-month reporting period.

7. Specific Control Equipment Operating Conditions:

a) The baghouse shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 05 (28) Glass Melting Tank (T138)

Description:

Glass melting furnace

Rated Capacity:	6 mmBTU/hour
Fuel:	Natural gas/propane fired
Construction commenced:	July 1993
Control equipment:	Baghouse, spray cooler and excess air burner
Processing rate:	0.5 ton/hour glass pull

APPLICABLE REGULATIONS:

Regulation 401 KAR 60:005, Section 3(ff), which incorporates by reference 40 CFR 60, Subpart CC, Standards of performance for glass manufacturing plants.

Regulation 401 KAR 57:002, Section 3 (l), which incorporates by reference the federal regulation 40 CFR 61, Subpart N, National emission standard for inorganic arsenic emissions from glass manufacturing plants.

1. Operating Limitations:

None

2. Emission Limitations:

a) Pursuant to Regulation 40 CFR 61.162(b)(2), uncontrolled total arsenic emission from the glass melting furnace shall be conveyed to a control device and reduced by 85 percent.

b) Pursuant to Regulation 40 CFR 60.292, emissions of particulate matter shall not exceed 0.5 g/kg (1.0 lb/ton) of glass produced based on a three hour average.

3. Testing Requirements:

See Section D

4. Monitoring Requirements:

a) Pursuant to Regulation 40 CFR 61.163(a), the permittee shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of opacity of emissions discharged into the atmosphere from the control device.

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b) Pursuant to Regulation 40 CFR 61.163(a), the permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of temperature of the gas entering the control device.

c) The permittee shall meet the requirements mentioned in 40 CFR Part 60, §60.13(d) and §60.13(f) for operating the continuous monitoring devices.

d) Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under 40 CFR Part 60, §60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements by completing a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

e) Pursuant to Regulation 40 CFR 61.163(g), the permittee shall:

i) Reduce all opacity data to 6-minute averages. Six-minute averages shall be calculated from 24 or more data points equally spaced over each 6-minute period. Data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages calculated under this paragraph.

ii) Calculate 15-minute averages of the temperature of the gas entering the control device for each 15-minute operating periods.

f) The permittee shall monitor the amount of glass produced on a monthly basis.

5. Recordkeeping Requirements:

a) Pursuant to Regulation 40 CFR 61.165(a), the permittee shall maintain records of the following information:
1. All measurements, including continuous monitoring for measurement of opacity, and temperature of gas entering a control device.
2. All emission test data.
3. All continuous monitoring system performance evaluations, including calibration checks and adjustments.
4. The occurrence and duration of all startups, shutdown, and malfunctions of the furnace.
5. All malfunctions of the air pollution control system.
6. All periods during which any continuous monitoring system or monitoring device is inoperative.
7. All records of maintenance and repairs for each air pollution control system, continuous monitoring system, or monitoring device.

b) The permittee shall maintain the record of glass production on a monthly basis.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

6. Reporting Requirements:

a) Pursuant to Regulation 40 CFR 61.165(f), the permittee shall submit a written report to the division every six months if excess opacity occurs during the preceding 6 month period. Each six months reporting period will begin on January 1 and July 1 of each year. For the purposes of this report, an occurrence of excess opacity is any 6-minute period during which the average opacity, as measured by the continuous monitoring system, exceeds the opacity level determined under Regulation 40 CFR 61.163(c)(3) or 61.163(d).

b) The report shall be postmarked by the thirtieth day following the end of the 6-month period and including the following information:

1. The magnitude of the excess opacity, any conversion factor(s) used, and the date and time of commencement and completion of such occurrence of excess opacity.

2. Specific identification of each occurrence of excess opacity that occurs during startups, shutdowns, and malfunctions of the source.

3. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of the system repairs or adjustments.

7. Specific Control Equipment Operating Conditions:

a) The baghouse and the spray cooler shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 06 (29) Glass Melting Tank (T139)

Description:

Glass melting furnace

Rated Capacity:	6.5 mmBTU/hour
Fuel:	Natural gas/propane fired
Construction commenced:	December 1989
Control equipment:	Baghouse, spray cooler and excess air burner
Processing rate:	0.5 ton/hour glass pull

APPLICABLE REGULATIONS:

Regulation 401 KAR 60:005, Section 3(ff), which incorporates by reference 40 CFR 60, Subpart CC, Standards of performance for glass manufacturing plants.

Regulation 401 KAR 57:002, Section 3 (l), which incorporates by reference the federal regulation 40 CFR 61, Subpart N, National emission standard for inorganic arsenic emissions from glass manufacturing plants.

1. Operating Limitations:

None

2. Emission Limitations:

a) Pursuant to Regulation 40 CFR 61.162(b)(2), uncontrolled total arsenic emission from the glass melting furnace shall be conveyed to a control device and reduced by 85 percent.

b) Pursuant to Regulation 40 CFR 60.292, emissions of particulate matter shall not exceed 0.5 g/kg (1.0 lb/ton) of glass produced based on a three hour average.

3. Testing Requirements:

See Section D

4. Monitoring Requirements:

a) Pursuant to Regulation 40 CFR 61.163(a), the permittee shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of opacity of emissions discharged into the atmosphere from the control device.

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b) Pursuant to Regulation 40 CFR 61.163(a), the permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of temperature of the gas entering the control device.

c) The permittee shall meet the requirements mentioned in 40 CFR Part 60, §60.13(d) and §60.13(f) for operating the continuous monitoring devices.

d) Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under 40 CFR Part 60, §60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements by completing a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

e) Pursuant to Regulation 40 CFR 61.163(g), the permittee shall:

i) Reduce all opacity data to 6-minute averages. Six-minute averages shall be calculated from 24 or more data points equally spaced over each 6-minute period. Data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages calculated under this paragraph.

ii) Calculate 15-minute averages of the temperature of the gas entering the control device for each 15-minute operating periods.

f) The permittee shall monitor the amount of glass produced on a monthly basis.

5. Recordkeeping Requirements:

a) Pursuant to Regulation 40 CFR 61.165(a), the permittee shall maintain records of the following information:
1. All measurements, including continuous monitoring for measurement of opacity, and temperature of gas entering a control device.
2. All emission test data.
3. All continuous monitoring system performance evaluations, including calibration checks and adjustments.
4. The occurrence and duration of all startups, shutdown, and malfunctions of the furnace.
5. All malfunctions of the air pollution control system.
6. All periods during which any continuous monitoring system or monitoring device is inoperative.
7. All records of maintenance and repairs for each air pollution control system, continuous monitoring system, or monitoring device.

b) The permittee shall maintain the record of glass production on a monthly basis.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

6. Reporting Requirements:

a) Pursuant to Regulation 40 CFR 61.165(f), the permittee shall submit a written report to the division every six months if excess opacity occurs during the preceding 6 month period. Each six months reporting period will begin on January 1 and July 1 of each year. For the purposes of this report, an occurrence of excess opacity is any 6-minute period during which the average opacity, as measured by the continuous monitoring system, exceeds the opacity level determined under Regulation 40 CFR 61.163(c)(3) or 61.163(d).

b) The report shall be postmarked by the thirtieth day following the end of the 6-month period and including the following information:

1. The magnitude of the excess opacity, any conversion factor(s) used, and the date and time of commencement and completion of such occurrence of excess opacity.

2. Specific identification of each occurrence of excess opacity that occurs during startups, shutdowns, and malfunctions of the source.

3. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of the system repairs or adjustments.

7. Specific Control Equipment Operating Conditions:

a) The baghouse and the spray cooler shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 07 (30) Glass Melting Tank (T1310)

Description:

Glass melting furnace

Rated Capacity:	5 mmBTU/hour
Fuel:	Natural gas/propane fired
Construction commenced:	May 1989
Control equipment:	Baghouse, spray cooler and excess air burner
Processing rate:	0.5 ton/hour glass pull

APPLICABLE REGULATIONS:

Regulation 401 KAR 60:005, Section 3(ff), which incorporates by reference 40 CFR 60, Subpart CC, Standards of performance for glass manufacturing plants.

Regulation 401 KAR 57:002, Section 3 (l), which incorporates by reference the federal regulation 40 CFR 61, Subpart N, National emission standard for inorganic arsenic emissions from glass manufacturing plants.

1. Operating Limitations:

None

2. Emission Limitations:

a) Pursuant to Regulation 40 CFR 61.162(b)(2), uncontrolled total arsenic emission from the glass melting furnace shall be conveyed to a control device and reduced by 85 percent.

b) Pursuant to Regulation 40 CFR 60.292, emissions of particulate matter shall not exceed 0.5 g/kg (1.0 lb/ton) of glass produced based on a three hour average.

3. Testing Requirements:

See Section D

4. Monitoring Requirements:

a) Pursuant to Regulation 40 CFR 61.163(a), the permittee shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of opacity of emissions discharged into the atmosphere from the control device.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

b) Pursuant to Regulation 40 CFR 61.163(a), the permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of temperature of the gas entering the control device.

c) The permittee shall meet the requirements mentioned in 40 CFR Part 60, §60.13(d) and §60.13(f) for operating the continuous monitoring devices.

d) Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under 40 CFR Part 60, §60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements by completing a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

e) Pursuant to Regulation 40 CFR 61.163(g), the permittee shall:

i) Reduce all opacity data to 6-minute averages. Six-minute averages shall be calculated from 24 or more data points equally spaced over each 6-minute period. Data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages calculated under this paragraph.

ii) Calculate 15-minute averages of the temperature of the gas entering the control device for each 15-minute operating periods.

f) The permittee shall monitor the amount of glass produced on a monthly basis.

5. Recordkeeping Requirements:

a) Pursuant to Regulation 40 CFR 61.165(a), the permittee shall maintain records of the following information:
1. All measurements, including continuous monitoring for measurement of opacity, and temperature of gas entering a control device.
2. All emission test data.
3. All continuous monitoring system performance evaluations, including calibration checks and adjustments.
4. The occurrence and duration of all startups, shutdown, and malfunctions of the furnace.
5. All malfunctions of the air pollution control system.
6. All periods during which any continuous monitoring system or monitoring device is inoperative.
7. All records of maintenance and repairs for each air pollution control system, continuous monitoring system, or monitoring device.

b) The permittee shall maintain the record of glass production on a monthly basis.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

6. Reporting Requirements:

a) Pursuant to Regulation 40 CFR 61.165(f), the permittee shall submit a written report to the division every six months if excess opacity occurs during the preceding 6 month period. Each six months reporting period will begin on January 1 and July 1 of each year. For the purposes of this report, an occurrence of excess opacity is any 6-minute period during which the average opacity, as measured by the continuous monitoring system, exceeds the opacity level determined under Regulation 40 CFR 61.163(c)(3) or 61.163(d).

b) The report shall be postmarked by the thirtieth day following the end of the 6-month period and including the following information:

1. The magnitude of the excess opacity, any conversion factor(s) used, and the date and time of commencement and completion of such occurrence of excess opacity.

2. Specific identification of each occurrence of excess opacity that occurs during startups, shutdowns, and malfunctions of the source.

3. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of the system repairs or adjustments.

7. Specific Control Equipment Operating Conditions:

a) The baghouse and the spray cooler shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 08 (31) Glass Melting Tank (T1311)

Description:

Glass melting furnace

Rated Capacity:	5 mmBTU/hour
Fuel:	Natural gas/propane fired
Construction commenced:	June 1995 (modified)
Control equipment:	Baghouse, spray cooler and excess air burner
Processing rate:	0.5 ton/hour glass pull

APPLICABLE REGULATIONS:

Regulation 401 KAR 60:005, Section 3(ff), which incorporates by reference 40 CFR 60, Subpart CC, Standards of performance for glass manufacturing plants.

Regulation 401 KAR 57:002, Section 3 (l), which incorporates by reference the federal regulation 40 CFR 61, Subpart N, National emission standard for inorganic arsenic emissions from glass manufacturing plants.

1. Operating Limitations:

None

2. Emission Limitations:

a) Pursuant to Regulation 40 CFR 61.162(b)(2), uncontrolled total arsenic emission from the glass melting furnace shall be conveyed to a control device and reduced by 85 percent.

b) Pursuant to Regulation 40 CFR 60.292, emissions of particulate matter shall not exceed 0.5 g/kg (1.0 lb/ton) of glass produced based on a three hour average.

3. Testing Requirements:

See Section D

4. Monitoring Requirements:

a) Pursuant to Regulation 40 CFR 61.163(a), the permittee shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of opacity of emissions discharged into the atmosphere from the control device.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

b) Pursuant to Regulation 40 CFR 61.163(a), the permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of temperature of the gas entering the control device.

c) The permittee shall meet the requirements mentioned in 40 CFR Part 60, §60.13(d) and §60.13(f) for operating the continuous monitoring devices.

d) Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under 40 CFR Part 60, §60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements by completing a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

e) Pursuant to Regulation 40 CFR 61.163(g), the permittee shall:

i) Reduce all opacity data to 6-minute averages. Six-minute averages shall be calculated from 24 or more data points equally spaced over each 6-minute period. Data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages calculated under this paragraph.

ii) Calculate 15-minute averages of the temperature of the gas entering the control device for each 15-minute operating periods.

f) The permittee shall monitor the amount of glass produced on a monthly basis.

5. Recordkeeping Requirements:

a) Pursuant to Regulation 40 CFR 61.165(a), the permittee shall maintain records of the following information:
1. All measurements, including continuous monitoring for measurement of opacity, and temperature of gas entering a control device.
2. All emission test data.
3. All continuous monitoring system performance evaluations, including calibration checks and adjustments.
4. The occurrence and duration of all startups, shutdown, and malfunctions of the furnace.
5. All malfunctions of the air pollution control system.
6. All periods during which any continuous monitoring system or monitoring device is inoperative.
7. All records of maintenance and repairs for each air pollution control system, continuous monitoring system, or monitoring device.

b) The permittee shall maintain the record of glass production on a monthly basis.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

6. Reporting Requirements:

a) Pursuant to Regulation 40 CFR 61.165(f), the permittee shall submit a written report to the division every six months if excess opacity occurs during the preceding 6 month period. Each six months reporting period will begin on January 1 and July 1 of each year. For the purposes of this report, an occurrence of excess opacity is any 6-minute period during which the average opacity, as measured by the continuous monitoring system, exceeds the opacity level determined under Regulation 40 CFR 61.163(c)(3) or 61.163(d).

b) The report shall be postmarked by the thirtieth day following the end of the 6-month period and including the following information:

1. The magnitude of the excess opacity, any conversion factor(s) used, and the date and time of commencement and completion of such occurrence of excess opacity.

2. Specific identification of each occurrence of excess opacity that occurs during startups, shutdowns, and malfunctions of the source.

3. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of the system repairs or adjustments.

7. Specific Control Equipment Operating Conditions:

a) The baghouse and the spray cooler shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 09 (42) Indirect Heat Exchanger

Description:
Natural gas horizontally-opposed fired
Maximum continuous rating: 10.5 MMBTU/hour
Secondary fuel: Propane or #2 fuel oil.
Construction Commenced: January 1987

Applicable Regulations:

Regulation 401 KAR 59:015, New indirect heat exchangers, applicable to an emissions unit with a capacity of less than 250 MMBTU/hour which commenced on or after April 9, 1972.

1. Operating Limitations:

None

2. Emission Limitations:

a) Pursuant to Regulation 401 KAR 59:015, Section 4(1)(c), particulate emissions shall not exceed 0.55 lb/MMBTU based on a three-hour-average. Compliance with the allowable particulate standard may be demonstrated by calculating particulate emissions using fuel oil usage rates, fuel analysis, and emission factor information:

PM Emissions (lb/MMBTU) from combustion of fuel oil = (U.S. EPA approved or AP-42 emissions factor: 2.0 lbs / 10^3 gallons) / (heating value from fuel analysis in MMBTU/10^3 gallons).

b) Pursuant to Regulation 401 KAR 59:015, Section 5(1), sulfur dioxide emissions shall not exceed 2.94 lb/MMBTU based on a twenty-four-hour average . While burning fuel oil, compliance with the allowable sulfur dioxide standard may be demonstrated by calculating sulfur dioxide emissions using fuel oil usage rates, fuel analysis, and emission factor information:

SO_2 Emissions (lb/MMBTU) from combustion of fuel oil= (U.S. EPA approved or AP-42 emission factor: 142S lbs / 10^3 gallons) / (heating value from fuel analysis in MMBTU / 10^3 gallons).

While burning natural gas or propane, this unit is considered to be in compliance with PM, SO_2 and opacity standard.

c) Pursuant to Regulation 401 KAR 59:015, Section 4(2), emissions shall not exceed 20% opacity based on a six minute average, except that a maximum of 40% opacity based on a six minute average, shall be permissible for not more than 6 consecutive minutes in any consecutive 60 minutes during cleaning the fire-box or blowing soot.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

3. Testing Requirements:

The permittee shall determine the opacity of emissions from the stack using U.S. EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. Specific Monitoring Requirements:

a) The permittee shall monitor the heat content and sulfur content of the fuel oil on each shipment received. The permittee may use fuel supplier certification to meet this requirement.

b) The permittee shall monitor the amount of fuel oil burned on a monthly basis.

5. Specific Recordkeeping Requirements:

a) Records of amount of fuel oil burned each month shall be maintained.

b) Records of the sulfur and heat content of fuel oil burned shall be maintained.

6. Specific Reporting Requirements:
See Conditions 5, 6, 7, and 8 in Section F.

7. Specific Control Equipment Operating Conditions:
None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 10 (67) Glass Melting Tank (T135)

Description:

Glass melting furnace

Rated Capacity:	21 mmBTU/hour
Fuel:	Natural gas/propane fired
Construction to commence:	Projected December 2000
Control equipment:	Baghouse, spray cooler and excess air burner
Processing rate:	1.37 ton/hour glass pull

APPLICABLE REGULATIONS:

Regulation 401 KAR 60:005, Section 3(ff), which incorporates by reference 40 CFR 60, Subpart CC, Standards of performance for glass manufacturing plants.

Regulation 401 KAR 57:002, Section 3 (l), which incorporates by reference the federal regulation 40 CFR 61, Subpart N, National emission standard for inorganic arsenic emissions from glass manufacturing plants.

1. Operating Limitations:

None

2. Emission Limitations:

a) Pursuant to Regulation 40 CFR 61.162(b)(2), uncontrolled total arsenic emission from the glass melting furnace shall be conveyed to a control device and reduced by 85 percent, while manufacturing F Glass (see Section B(8), Alternate Operating Scenario 1).

b Pursuant to Regulation 40 CFR 61.162(b)(1), uncontrolled total arsenic emissions from the glass melting furnace shall be less than 0.4 Mg per year, while operating under scenario 2 - F/G Glass, while manufacturing F/G glass (see section B(8), Alternate Operating Scenario 2).

b) Pursuant to Regulation 40 CFR 60.292, emissions of particulate matter shall not exceed 0.5 g/kg (1.0 lb/ton) of glass produced based on a three hour average.

3. Testing Requirements:

See Section D

4. Monitoring Requirements:

a) Pursuant to Regulation 40 CFR 61.163(a), the permittee shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of opacity of emissions discharged into the atmosphere from the control device.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

b) Pursuant to Regulation 40 CFR 61.163(a), the permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of temperature of the gas entering the control device.

c) The permittee shall meet the requirements mentioned in 40 CFR Part 60, §60.13(d) and §60.13(f) for operating the continuous monitoring devices.

d) Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under 40 CFR Part 60, §60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements by completing a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

e) Pursuant to Regulation 40 CFR 61.163(g), the permittee shall:

i) Reduce all opacity data to 6-minute averages. Six-minute averages shall be calculated from 24 or more data points equally spaced over each 6-minute period. Data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages calculated under this paragraph.

ii) Calculate 15-minute averages of the temperature of the gas entering the control device for each 15-minute operating periods.

f) The permittee shall monitor the amount of glass produced on a monthly basis.

g) All reporting requirements pursuant to Regulation 40 CFR 61.160 through 61.165, Subpart N.

5. Recordkeeping Requirements:

a) Pursuant to Regulation 40 CFR 61.165(a), the permittee shall maintain records of the following information:

1. All measurements, including continuous monitoring for measurement of opacity, and temperature of gas entering a control device.
2. All emission test data.
3. All continuous monitoring system performance evaluations, including calibration checks and adjustments.
4. The occurrence and duration of all startups, shutdown, and malfunctions of the furnace.
5. All malfunctions of the air pollution control system.
6. All periods during which any continuous monitoring system or monitoring device is inoperative.
7. All records of maintenance and repairs for each air pollution control system, continuous monitoring system, or monitoring device.
8. The permittee shall maintain the record of glass production on a monthly basis.
9. The operating scenario the unit is operating under.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

10. All recordkeeping requirements pursuant to Regulation 40 CFR 61.160 through 61.165, Subpart N.

6. Reporting Requirements:

a) Pursuant to Regulation 40 CFR 61.165(f), the permittee shall submit a written report to the division every six months if excess opacity occurs during the preceding 6 month period. Each six months reporting period will begin on January 1 and July 1 of each year. For the purposes of this report, an occurrence of excess opacity is any 6-minute period during which the average opacity, as measured by the continuous monitoring system, exceeds the opacity level determined under Regulation 40 CFR 61.163(c)(3) or 61.163(d).

b) The report shall be postmarked by the thirtieth day following the end of the 6-month period and including the following information:

1. The magnitude of the excess opacity, any conversion factor(s) used, and the date and time of commencement and completion of such occurrence of excess opacity.

2. Specific identification of each occurrence of excess opacity that occurs during startups, shutdowns, and malfunctions of the source.

3. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of the system repairs or adjustments.

c) The permittee shall maintain a report of the yearly NOx emissions on a twelve (12) month rolling average. The emissions shall be calculated on a monthly basis, based on a stack test emission factor and glass production rate.

d) All reporting requirements pursuant to Regulation 40 CFR 61.160 through 61.165, Subpart N.

7. Specific Control Equipment Operating Conditions:

a) The baghouse and the spray cooler shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

8. Alternate Operating Scenarios:

The alternate operating scenarios set forth below have been approved by the division based on information supplied with the application and during the application review process. The terms and conditions of each alternate operating scenario have been developed to ensure compliance with the applicable regulations. The permittee, when making a change from one operating scenario to another, shall record contemporaneously in a log at the permitted facility a record of the scenario under which the facility is operating. The permit shield, as provided in Section G, Condition (a)15, shall extend to each alternate operating scenario set forth in this Section. All conditions not specified under an alternate operating scenario shall remain unchanged from their permit values or requirements.

SCENARIO 1: F Glass

10 (67) Glass Melting Tank (T135)

This operating scenario corresponds to total glass production that produces arsenic emissions > 0.4 Mg/yr.

SCENARIO 2: F/G Glass

10 (67) Glass Melting Tank (T135)

This operating scenario corresponds to total glass production that produces arsenic emissions < 0.4 Mg/yr.

SCENARIO 3: G Glass

10 (67) Glass Melting Tank (T135)

This operating scenario corresponds to production of arsenic free glass.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 11 (68) Glass Melting Tank (T136)

Description:

Glass melting furnace

Rated Capacity:	10.5mmBTU/hour
Fuel:	Natural gas/propane fired
Construction to commence:	Projected April 2000
Control equipment:	Baghouse, spray cooler and excess air burner
Processing rate:	0.684 ton/hour glass pull

APPLICABLE REGULATIONS:

Regulation 401 KAR 60:005, Section 3(ff), which incorporates by reference 40 CFR 60, Subpart CC, Standards of performance for glass manufacturing plants.

Regulation 401 KAR 57:002, Section 3 (l), which incorporates by reference the federal regulation 40 CFR 61, Subpart N, National emission standard for inorganic arsenic emissions from glass manufacturing plants.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**

   a) Pursuant to Regulation 40 CFR 61.162(b)(2), uncontrolled total arsenic emission from the glass melting furnace shall be conveyed to a control device and reduced by 85 percent, while manufacturing F Glass (see Section B(8), Alternate Operating Scenario 1).

   b Pursuant to Regulation 40 CFR 61.162(b)(1), uncontrolled total arsenic emissions from the glass melting furnace shall be less than 0.4 Mg per year, while operating under scenario 2 - F/G Glass, while manufacturing F/G glass (see section B(8), Alternate Operating Scenario 2)**.**

   b) Pursuant to Regulation 40 CFR 60.292, emissions of particulate matter shall not exceed 0.5 g/kg (1.0 lb/ton) of glass produced based on a three hour average.

3. **Testing Requirements:**
   See Section D

4. **Monitoring Requirements:**
   a) Pursuant to Regulation 40 CFR 61.163(a), the permittee shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of opacity of emissions discharged into the atmosphere from the control device.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

b) Pursuant to Regulation 40 CFR 61.163(a), the permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of temperature of the gas entering the control device.

c) The permittee shall meet the requirements mentioned in 40 CFR Part 60, §60.13(d) and §60.13(f) for operating the continuous monitoring devices.

d) Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under 40 CFR Part 60, §60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements by completing a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

e) Pursuant to Regulation 40 CFR 61.163(g), the permittee shall:

i) Reduce all opacity data to 6-minute averages. Six-minute averages shall be calculated from 24 or more data points equally spaced over each 6-minute period. Data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages calculated under this paragraph.

ii) Calculate 15-minute averages of the temperature of the gas entering the control device for each 15-minute operating periods.

f) The permittee shall monitor the amount of glass produced on a monthly basis.

g) All reporting requirements pursuant to Regulation 40 CFR 61.160 through 61.165, Subpart N.

5. Recordkeeping Requirements:

a) Pursuant to Regulation 40 CFR 61.165(a), the permittee shall maintain records of the following information:

1. All measurements, including continuous monitoring for measurement of opacity, and temperature of gas entering a control device.
2. All emission test data.
3. All continuous monitoring system performance evaluations, including calibration checks and adjustments.
4. The occurrence and duration of all startups, shutdown, and malfunctions of the furnace.
5. All malfunctions of the air pollution control system.
6. All periods during which any continuous monitoring system or monitoring device is inoperative.
7. All records of maintenance and repairs for each air pollution control system, continuous monitoring system, or monitoring device.
8. The permittee shall maintain the record of glass production on a monthly basis.
9. The operating scenario the unit is operating under.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

10. All recordkeeping requirements pursuant to Regulation 40 CFR 61.160 through 61.165, Subpart N.

6. Reporting Requirements:

a) Pursuant to Regulation 40 CFR 61.165(f), the permittee shall submit a written report to the division every six months if excess opacity occurs during the preceding 6 month period. Each six months reporting period will begin on January 1 and July 1 of each year. For the purposes of this report, an occurrence of excess opacity is any 6-minute period during which the average opacity, as measured by the continuous monitoring system, exceeds the opacity level determined under Regulation 40 CFR 61.163(c)(3) or 61.163(d).

b) The report shall be postmarked by the thirtieth day following the end of the 6-month period and including the following information:

1. The magnitude of the excess opacity, any conversion factor(s) used, and the date and time of commencement and completion of such occurrence of excess opacity.

2. Specific identification of each occurrence of excess opacity that occurs during startups, shutdowns, and malfunctions of the source.

3. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of the system repairs or adjustments.

c) The permittee shall maintain a report of the yearly NOx emissions on a twelve (12) month rolling average. The emissions shall be calculated on a monthly basis, based on a stack test emission factor and glass production rate.

d) All reporting requirements pursuant to Regulation 40 CFR 61.160 through 61.165, Subpart N.

7. Specific Control Equipment Operating Conditions:

a) The baghouse and the spray cooler shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

8. Alternate Operating Scenarios:

The alternate operating scenarios set forth below have been approved by the division based on information supplied with the application and during the application review process. The terms and conditions of each alternate operating scenario have been developed to ensure compliance with the applicable regulations. The permittee, when making a change from one operating scenario to another, shall record contemporaneously in a log at the permitted facility a record of the scenario under which the facility is operating. The permit shield, as provided in Section G, Condition (a)15, shall extend to each alternate operating scenario set forth in this Section. All conditions not specified under an alternate operating scenario shall remain unchanged from their permit values or requirements.

SCENARIO 1: F Glass

11 (68) Glass Melting Tank (T136)

This operating scenario corresponds to total glass production that produces arsenic emissions > 0.4 Mg/yr.

SCENARIO 2: F/G Glass

11 (68) Glass Melting Tank (T136)

This operating scenario corresponds to total glass production that produces arsenic emissions < 0.4 Mg/yr.

SCENARIO 3: G Glass

11 (68) Glass Melting Tank (T136)

This operating scenario corresponds to production of arsenic free glass.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 12 (69) Glass Melting Tank (T137)

Description:

Glass melting furnace

Rated Capacity:	10.5mmBTU/hour
Fuel:	Natural gas/propane fired
Construction to commence:	Projected December 1999
Control equipment:	Baghouse, spray cooler and excess air burner
Processing rate:	0.684 ton/hour glass pull

APPLICABLE REGULATIONS:

Regulation 401 KAR 60:005, Section 3(ff), which incorporates by reference 40 CFR 60, Subpart CC, Standards of performance for glass manufacturing plants.

Regulation 401 KAR 57:002, Section 3 (l), which incorporates by reference the federal regulation 40 CFR 61, Subpart N, National emission standard for inorganic arsenic emissions from glass manufacturing plants.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**

   a) Pursuant to Regulation 40 CFR 61.162(b)(2), uncontrolled total arsenic emission from the glass melting furnace shall be conveyed to a control device and reduced by 85 percent, while manufacturing F Glass (see Section B(8), Alternate Operating Scenario 1).

   b Pursuant to Regulation 40 CFR 61.162(b)(1), uncontrolled total arsenic emissions from the glass melting furnace shall be less than 0.4 Mg per year, while operating under scenario 2 - F/G Glass, while manufacturing F/G glass (see section B(8), Alternate Operating Scenario 2)**.**

   b) Pursuant to Regulation 40 CFR 60.292, emissions of particulate matter shall not exceed 0.5 g/kg (1.0 lb/ton) of glass produced based on a three hour average.

3. **Testing Requirements:**
   See Section D

4. **Monitoring Requirements:**
   a) Pursuant to Regulation 40 CFR 61.163(a), the permittee shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of opacity of emissions discharged into the atmosphere from the control device.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

b) Pursuant to Regulation 40 CFR 61.163(a), the permittee shall install, calibrate, maintain, and operate a monitoring device for the continuous measurement of temperature of the gas entering the control device.

c) The permittee shall meet the requirements mentioned in 40 CFR Part 60, §60.13(d) and §60.13(f) for operating the continuous monitoring devices.

d) Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under 40 CFR Part 60, §60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements by completing a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

e) Pursuant to Regulation 40 CFR 61.163(g), the permittee shall:

i) Reduce all opacity data to 6-minute averages. Six-minute averages shall be calculated from 24 or more data points equally spaced over each 6-minute period. Data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages calculated under this paragraph.

ii) Calculate 15-minute averages of the temperature of the gas entering the control device for each 15-minute operating periods.

f) The permittee shall monitor the amount of glass produced on a monthly basis.

g) All reporting requirements pursuant to Regulation 40 CFR 61.160 through 61.165, Subpart N.

5. Recordkeeping Requirements:

a) Pursuant to Regulation 40 CFR 61.165(a), the permittee shall maintain records of the following information:

1. All measurements, including continuous monitoring for measurement of opacity, and temperature of gas entering a control device.
2. All emission test data.
3. All continuous monitoring system performance evaluations, including calibration checks and adjustments.
4. The occurrence and duration of all startups, shutdown, and malfunctions of the furnace.
5. All malfunctions of the air pollution control system.
6. All periods during which any continuous monitoring system or monitoring device is inoperative.
7. All records of maintenance and repairs for each air pollution control system, continuous monitoring system, or monitoring device.
8. The permittee shall maintain the record of glass production on a monthly basis.
9. The operating scenario the unit is operating under.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

10. All recordkeeping requirements pursuant to Regulation 40 CFR 61.160 through 61.165, Subpart N.

6. Reporting Requirements:

a) Pursuant to Regulation 40 CFR 61.165(f), the permittee shall submit a written report to the division every six months if excess opacity occurs during the preceding 6 month period. Each six months reporting period will begin on January 1 and July 1 of each year. For the purposes of this report, an occurrence of excess opacity is any 6-minute period during which the average opacity, as measured by the continuous monitoring system, exceeds the opacity level determined under Regulation 40 CFR 61.163(c)(3) or 61.163(d).

b) The report shall be postmarked by the thirtieth day following the end of the 6-month period and including the following information:

1. The magnitude of the excess opacity, any conversion factor(s) used, and the date and time of commencement and completion of such occurrence of excess opacity.

2. Specific identification of each occurrence of excess opacity that occurs during startups, shutdowns, and malfunctions of the source.

3. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of the system repairs or adjustments.

c) The permittee shall maintain a report of the yearly NOx emissions on a twelve (12) month rolling average. The emissions shall be calculated on a monthly basis, based on a stack test emission factor and glass production rate.

d) All reporting requirements pursuant to Regulation 40 CFR 61.160 through 61.165, Subpart N.

7. Specific Control Equipment Operating Conditions:

a) The baghouse and the spray cooler shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

8. Alternate Operating Scenarios:

The alternate operating scenarios set forth below have been approved by the division based on information supplied with the application and during the application review process. The terms and conditions of each alternate operating scenario have been developed to ensure compliance with the applicable regulations. The permittee, when making a change from one operating scenario to another, shall record contemporaneously in a log at the permitted facility a record of the scenario under which the facility is operating. The permit shield, as provided in Section G, Condition (a)15, shall extend to each alternate operating scenario set forth in this Section. All conditions not specified under an alternate operating scenario shall remain unchanged from their permit values or requirements.

SCENARIO 1: F Glass

12 (69) Glass Melting Tank (T137)

This operating scenario corresponds to total glass production that produces arsenic emissions > 0.4 mg/yr.

SCENARIO 2: F/G Glass

12 (69) Glass Melting Tank (T137)

This operating scenario corresponds to total glass production that produces arsenic emissions < 0.4 mg/yr.

SCENARIO 3: G Glass

12 (69) Glass Melting Tank (T137)

This operating scenario corresponds to production of arsenic free glass.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant the permittee must comply with the applicable regulation(s). Process and emission control equipment at each insignificant activity subject to a generally applicable regulation shall be inspected monthly and a qualitative visible emissions evaluation made. The results of the inspections and observations shall be recorded in a log, noting color, duration, density (heavy or light), cause and any corrective actions taken for any abnormal visible emissions.

Description	Generally Applicable Regulation
1. Sand silo equipped with baghouse	401 KAR 61:020
2. Sand separator equipped with baghouse	401 KAR 61:020
3. Raw material unloading & storage	401 KAR 61:020
4. Small hood weigh scales equipped with baghouse	401 KAR 61:020
5. 6 Forming units, natural gas burned	401 KAR 61:020
6. 2 Lehrs for glass melting tanks	401 KAR 61:020
7. 5 Mold preheaters, 1 MMBTU each	None
8. Mold release, 750 gallons/year	None
9. Maintenance paints, 208 gallons/year	401 KAR 61:020
10. Degreasing units using safety kleen (0.1 gallons/hour)	None
11. Paint booth, drying booth, and curing oven (0.02 gallons/hour)	401 KAR 61:020
12. Sand blaster equipped with baghouse (0.006 ton/hour)	401 KAR 59:010
13. Sand blaster equipped with baghouse (0.002 ton/hour)	401 KAR 59:010
14. Sand blaster equipped with baghouse (0.006 ton/hour)	401 KAR 59:010
15. Wood cutting & shaping equipped with baghouse	401 KAR 59:010
16. Three laboratory hoods	401 KAR 59:010
17. Brick drilling and cutting equipped with baghouse (0.075 ton/hour)	401 KAR 59:010
18. Spray coater (0.0002 ton/hour)	401 KAR 61:020
19. Natural gas fired excess air burner (2.75 MMBTU/hour)	None
20. Nine natural gas/propane forced comfort heater (5 MMBTU/hour, each)	None
21. Natural gas/propane fired boiler (60 hp)	401 KAR 59:015
22. One diesel emergency generator (500 hp)	None
23. Two diesel emergency generators (450 hp each)	None
24. Two diesel emergency generators (500 hp each)	None
25. Four fuel oil storage tanks	None

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

Description	Generally Applicable Regulation
26. Bag collection system	401 KAR 59:010
27. Arsenic acid storage tank (15,200 gallons capacity)	None
28. Glass Melting Furnace (T131)	401 KAR 61:020

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. Particulate, arsenic and visible emissions as measured by applicable methods referenced in Regulation 401 KAR 50:015, shall not exceed the respective limitations specified herein.

2. Performance testing for arsenic:

   a) The permittee shall conduct an emission test as described in Regulation 40 CFR 61:164(e) on each control device to demonstrate compliance with the percent reduction requirements of inorganic arsenic emissions while operating all glass melting tanks associated with each control device being tested, within one (1) year of initial startup of all new melting tanks (Emission Units 10, 11, and 12).

   b) The permittee shall determine the opacity and temperature value following the procedure as described in Regulation 40 CFR 61.163(c) during the emission test.

   c) See General Condition G(d)5.

3. Performance testing for particulate:

   a) The permittee shall conduct a performance test to demonstrate compliance with the particulate emission standard while operating all glass melting tanks associated with each control device being tested, within one (1) year of initial startup of all new melting tanks (Emission Units 10, 11, and 12).

   b) See General Condition G(d)5.

4. Performance testing for NO_X:

   a) The permittee shall conduct a performance test to establish emission factor data to calculate NOx emissions while operating each new glass melting tank in accordance with General Condition G(d)5.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to Regulation 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place as defined in this permit, and time of sampling or measurements.
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement;

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [Regulation 401 KAR 50:035, Permits, Section 7(1)(d)2 and Regulation 401 KAR 50:035, Permits, Section 7(2)(c)]

3. In accordance with the requirements of Regulation 401 KAR 50:035, Permits, Section 7(2)(c) the permittee shall allow the Cabinet or authorized representatives to perform the following:
   a. Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
   b. Have access to and copy, at reasonable times, any records required by the permit:
      i. During normal office hours, and
      ii. During periods of emergency when prompt access to records is essential to proper assessment by the Cabinet;
   c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
      i. During all hours of operation at the source,
      ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
      iii. During an emergency; and
   d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
      i. During all hours of operation at the source,
      ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
      iii. During an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be reported to the Division's Frankfort Regional Office no later than the six-month anniversary date of this permit and every six months thereafter during the life of this permit, unless otherwise stated in this permit. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of Regulation 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to Section 6(1) of Regulation 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.

6. a. In accordance with the provisions of Regulation 401 KAR 50:055, Section 1 the owner or operator shall notify the Division for Air Quality's Frankfort Regional Office concerning startups, shutdowns, or malfunctions as follows:
   1. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   2. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.

   b. In accordance with the provisions of Regulation 401 KAR 50:035, Section 7(1)(e)2, the owner or operator shall promptly report deviations from permit requirements including those attributed to upset conditions to the Division for Air Quality's Frankfort Regional Office. Prompt reporting shall be defined as quarterly for any deviation related to emission standards (other than emission exceedances covered by condition 6(a) above) and semi-annually for all other deviations from the permit requirements if not otherwise specified in the permit.

7. Pursuant to Regulation 401 KAR 50:035, Permits, Section 7(2)(b), the permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division for Air Quality's Frankfort Regional Office and the U.S. EPA in accordance with the following requirements:
   a. Identification of each term or condition of the permit that is the basis of the certification;
   b. The compliance status regarding each term or condition of the permit;
   c. Whether compliance was continuous or intermittent; and
   d. The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7(1)(c),(d), and (e).
   e. The certification shall be postmarked by the thirtieth (30) day following the applicable permit issuance anniversary date.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Frankfort Regional Office
643 Teton Trail, Suite B
Frankfort, KY 40601

U. S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

8. In accordance with Regulation 401 KAR 50:035, Section 23, the permittee shall provide the division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission report is mailed to the permittee.

9. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G - GENERAL CONDITIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. A noncompliance shall be (a) violation(s) of State Regulation 401 KAR 50:035, Permits, Section 7(3)(d) and Federal Statute 42 USC 7401 through 7671q (the Clean Air Act]) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.

2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition.

3. This permit may be revised, revoked, reopened and reissued, or terminated for cause. The permit will be reopened for cause and revised accordingly under the following circumstances:
   a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to Regulation 401 KAR 50:035, Section 12(2)(c);
   b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
   c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

   Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. [Regulation 401 KAR 50:035, Permits, Section 7(2)(b)3e and Regulation 401 KAR 50:035, Permits, Section 7(3)(j)]

5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority.

SECTION G - GENERAL CONDITIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [Regulation 401 KAR 50:035, Permits, Section 7(3)(k)]

7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [Regulation 401 KAR 50:035, Permits, Section 7(3)(e)]

8. Except as identified as state-origin requirements in this permit, all terms and conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States.

9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in Regulation 401 KAR 50:038, Section 3(6). [Regulation 401 KAR 50:035, Permits, Section 7(3)(h)]

10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [Regulation 401 KAR 50:035, Permits, Section 8(3)(b)]

11. This permit shall not convey property rights or exclusive privileges. [Regulation 401 KAR 50:035, Permits, Section 7 (3)(g)]

12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.

13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [Regulation 401 KAR 50:035 , Permits, Section 7(2)(b)5]

14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [Regulation 401 KAR 50:035, Permits, Section 8(3)(a)]

15 Permit Shield: Except as provided in State Regulation 401 KAR 50:035, Permits, compliance by the emissions units listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of issuance of this permit.

16. All previously issued construction and operating permits are hereby subsumed into this permit.

SECTION G - GENERAL CONDITIONS (CONTINUED)

17. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the division shall be notified of the actual test date at least ten (10) days prior to the test.

(b) Permit Expiration and Reapplication Requirements

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [Regulation 401 KAR 50:035, Permits, Section 12]

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of Regulation 401 KAR 50:035, Section 15.

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority thirty (30) days in advance of the transfer.

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements
For Emission Units: 10, 11, and 12 (Melting Tanks T135, T136, and T137)

1. Construction of process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.

2. Within thirty (30) days following commencement of construction, and within fifteen (15) days following start-up, and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Division for Air Quality's Frankfort Regional Office in writing, with a copy to the division's Frankfort Central Office, notification of the following:
   a. The date when construction commenced.
   b. The date of start-up of the affected facilities listed in this permit.

SECTION G - GENERAL CONDITIONS (CONTINUED)

c. The date when the maximum production rate specified in the permit application was achieved.

3. Pursuant to State Regulation 401 KAR 50:035, Permits, Section 13(1), unless construction is commenced on or before 18 months after the date of issue of this permit, or if construction is commenced and then stopped for any consecutive period of 18 months or more, or if construction is not completed within eighteen (18) months of the scheduled completion date, then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Extensions of the time periods specified herein may be granted by the division upon a satisfactory request showing that an extension is justified.

4. Operation of the affected facilities for which construction is authorized by this permit shall not commence until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055, except as provided in Section I of this permit.

5. a. Pursuant to State Regulation 401 KAR 59:005, General provisions, Section 2(1), this permit shall allow time for the initial start-up, operation and performance testing of the affected facilities listed herein. However, within 60 days after achieving the maximum production rate at which the affected facilities will be operated, but not later than 180 days after initial start-up of such facilities, the owner or operator shall conduct Inorganic Arsenic, Particulate, and NOx performance tests on each new glass melting furnace (emission units 10, 11, and 12) and furnish the Division’s Frankfort office a written report of the results of such performance tests.

b. Pursuant to State Regulation 401 KAR 59:005, General provisions, Section 3(1)(b), unless notification and justification to the contrary are received by this Division, the date of achieving the maximum production rate at which the affected facilities will be operated shall be deemed to be 30 days after initial start-up.

c. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1.(1), at least 30 days prior to the date of the required performance test(s), the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort office. The protocol form shall be utilized by the Division to determine if a pretest meeting is required. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least 10 days prior to the test(s).

d. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork. Protocol (Form DEP 6027) to the division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the division shall be notified of the actual test date at least ten (10) days prior to the test.

SECTION G - GENERAL CONDITIONS (CONTINUED)

(e) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
   a. An emergency occurred and the permittee can identify the cause of the emergency;
   b. The permitted facility was at the time being properly operated;
   c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,

   d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of Regulation 401 KAR 50:035, Permits, Section 7(1)(e)2, and include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken. This requirement does not relieve the source of any other local, state or federal notification requirements.

2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement.

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [Regulation 401 KAR 50:035, Permits, Section 9(3)]

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

   RMP Reporting Center
   P.O. Box 3346
   Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information by the division or the U.S. EPA.

SECTION G - GENERAL CONDITIONS (CONTINUED)

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

   a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.

   b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.

   c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

   d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the record keeping requirements pursuant to 40 CFR 82.166.

   e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

   f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None